

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-14 (canceled).

15. (New) A press-fit diode, comprising:

a head wire;

a base;

a chip connected via solder layers to the head wire and to the base; and

a plastic sheathing which includes a sleeve and is situated at least in an area of the chip and forms a mechanical connection, wherein the base at least partially encloses the plastic sheathing and forms a housing with the plastic sheathing, and wherein the base includes at least one undercut which extends into the plastic sheathing, and wherein a gap is provided between the sleeve of the plastic sheathing and the base.

16. (New) The press-fit diode as recited in Claim 15, wherein one of the housing and the base is made of at least one of an electrically conductive material and thermally conductive material.

17. (New) The press-fit diode as recited in Claim 16, wherein the height of the base is selected to be between 0.5 mm to

0.8 mm to achieve an adequate clamping of the base and the head wire.

18. (New) The press-fit diode as recited in Claim 17, wherein the housing has one of bevels and lead-in chamfers which enable the diode to be pressed into a rectifier.

19. (New) The press-fit diode as recited in Claim 17, wherein the plastic sheathing in the area of the chip includes at least one sleeve and one area filled with a casting compound.

20. (New) The press-fit diode as recited in Claim 17, wherein a trench having a predetermined depth is provided between the sleeve and an outer area of the base.

21. (New) The press-fit diode as recited in Claim 20, wherein the trench has a width which is approximately 0.5 mm in at least one area of the trench.

22. (New) The press-fit diode as recited in Claim 21, wherein the width of the trench is essentially uniform over the entire depth of the trench.

23. (New) The press-fit diode as recited in Claim 21, wherein the width of the trench is variable over the depth of the trench.

24. (New) The press-fit diode as recited in Claim 17, wherein the base includes an outer region having a first area with a

first inner diameter and a second area with a second inner diameter smaller than the first inner diameter.

25. (New) A method for manufacturing a press-fit diode, the press-fit diode including a head wire, a base, a chip connected via solder layers to the head wire and to the base, and a plastic sheathing which includes a sleeve and is situated at least in an area of the chip and forms a mechanical connection, wherein the base at least partially encloses the plastic sheathing and forms a housing with the plastic sheathing, and wherein the base includes at least one undercut which extends into the plastic sheathing, and wherein a gap is provided between the sleeve of the plastic sheathing and the base, the method comprising:

fixedly mounting the sleeve of the plastic sheathing against one of an inner surface of an outer region of the base edge and an outer surface of an elevation element formed at a surface extending from the bottom of the undercut; and

wherein one of: a) the inner diameter of the outer region of the base is selected to be slightly smaller than the outer diameter of the plastic sheathing; and b) the outer diameter of the elevation element is selected to be slightly larger than the inner diameter of the sleeve.